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UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No. PKZ-018CPCN First Inventor Mark L. Nelson METHODS OF PREPARING SUBSTITUTED TETRACYCLINES WITH TRANSITION METAL-**BASED CHEMISTRIES**

Express Mail Label No. EL 982738639 US MS Patent Application APPLICATION ELEMENTS Commissioner for Patents ADDRESS TO: P.O. Box 1450 See MPEP chapter 600 concerning utility patent application contents. Alexandria, VA 22313-1450 CD-ROM or CD-R in duplicate, large table or Fee Transmittal Form (e.g., PTO/SB/17) (Submit an original, and a duplicate for fee processing) Computer Program (Appendix) Applicant claims small entity status. Nucleotide and/or Amino Acid Sequence Submission 8. See 37 CFR 1.27. (if applicable, all necessary) x Specification [Total Pages 41 Computer Readable Form (CRF) (preferred arrangement set forth below) b. Specification Sequence Listing on: - Descriptive title of the invention Cross Reference to Related Applications CD-ROM or CD-R (2 copies); or Paper Statement Regarding Fed sponsored R & D Reference to sequence listing, a table Statements verifying identity of above copies C. or a computer program listing appendix Background of the Invention **ACCOMPANYING APPLICATION PARTS** - Brief Summary of the Invention Brief Description of the Drawings (if filed) 9. Assignment Papers (cover sheet & document(s)) - Detailed Description 37 CFR 3.73(b) Statement Power of 10. - Abstract of the Disclosure (when there is an assignee) Drawing(s) (35 U.S.C. 113) [Total Sheets 11. English Translation Document (if applicable) Information Disclosure Copies of IDS 5. Oath or Declaration [Total Sheets 12. Statement (IDS)/PTO-1449 Newly executed (original or copy) 13 Preliminary Amendment Copy from a prior application (37 CFR 1.63(d)) Return Receipt Postcard (MPEP 503) 14. x (for continuation/divisional with Box 18 completed) (Should be specifically itemized) Certified Copy of Priority Document(s) 15. DELETION OF INVENTOR(S) Signed statement attached deleting inventor(s) Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b). 16. Applicant must attach form PTO/SB/35 or its equivalent. Copy of Five-Month Request for Extension 17. Other: Х of Time of prior application 6. X Application Data Sheet. See 37 CFR 1.76 18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76: x Continuation Divisional Continuation-in-part (CIP) of prior application No.: 10/391923 Not Yet Assigned Art Unit: Prior application information: Examiner For CONTINUATION OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts. 19. CORRESPONDENCE ADDRESS X Customer Number: 00959 Correspondence address below OR LAHIVE & COCKFIELD, LLP Name Elizabeth A. Hanley Address 28 State Street City **Boston** MA Zip Code 02109 Country US Telephone (617) 227-7400 (617) 742-4214 Name (Print/Type) Registration No. (Attorney/Agent) 53,623 Soroos Signature January 26, 2004

I hereby certify that this correspondence is being deposited with the U.S. Postal Service as Express Mail, Airbill No. EL 982738639 US, in an envelope addressed to: MS Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below

Dated: January 26, 2004

Signature:

(Cynthia M. Soroos)

PTO/SB/17 (10-03)
Approved for use through 7/31/2006. OMB 0651-0032
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| FEE TRANSMITTAL | | Applic | ation | Numbe | er Not Yet Assigned | Not Yet Assigned | | | |
| for FY 2004 | | Filing | Date | _ | Concurrently Herewith | | | | |
| | | First N | Named | Inven | tor Mark L. Nelson | | | | |
| Effective 10/01/2003, Patent fees are subject to annual revision. | | Exam | iner Na | ame | Not Yet Assigned | | | | |
| Applicant claims small entity status. See 37 CFR 1.27 | | Art Unit | | | 1616 | | | | |
| TOTAL AMOUNT OF PAYMENT (\$) 1,808.00 | | Attorn | ey Doo | ket No | PKZ-018CPCN | | | | |
| METHOD OF PAYMENT (check all that apply) | | | | FEE | CALCULATION (continued) | | | | |
| Check Credit Money Other None | 2 4 | DDITIO | SNIAI | | · · · · · · · · · · · · · · · · · · · | | | | |
| Creck Card Order Other None | 3. A | אווטטוו | JNAL | FEES | | | | | |
| χ Deposit Account: | | | 0 | F-414- | | | | | |
| Deposit Account 12-0080 | Fee | Entity Fee | Fee | Entity Fee | | | | | |
| Number | Code | (\$) | Code | (\$) | Fee Description Fee I | Paid | | | |
| Deposit Account Lahive & Cockfield, LLP | 1051 | 130 | 2051 | 65 | Surcharge – late filing fee or oath | | | | |
| Name | 1052 | 50 | 2052 | 25 | Surcharge – late provisional filing fee or cover | | | | |
| The Director is authorized to: (check all that apply) | 4050 | 400 | 4050 | 400 | sheet. | | | | |
| X Charge fee(s) indicated below X Credit any overpayments | 1053 | 130 | 1053 | 130 | Non-English specification | | | | |
| X Charge any additional fee(s) or any underpayment of fee(s) | 1812 | 2,520 | 1812 | 2,520 | For filing a request for ex parte reexamination | | | | |
| Charge fee(s) indicated below, except for the filing fee | 1804 | 920* | 1804 | 920* | Requesting publication of SIR prior to Examiner action | | | | |
| to the above-identified deposit account. | 1805 | 1,840* | 1805 | 1,840* | Requesting publication of SIR after | \neg | | | |
| FEE CALCULATION | 1251 | 110 | 2251 | 55 | Examiner action Extension for reply within first month | \dashv | | | |
| 1. BASIC FILING FEE | 1252 | 420 | 2252 | 210 | Extension for reply within second month | | | | |
| Large Entity Small Entity | 1253 | 950 | 2253 | 475 | Extension for reply within third month | | | | |
| Fee Fee Fee Fee Fee Description Fee Paid Code (\$) Code (\$) | 1254 | 1,480 | 2254 | 740 | Extension for reply within fourth month | | | | |
| 1001 770 2001 385 Utility filing fee 770.00 | 1255 | 2,010 | 2255 | 1,005 | Extension for reply within fifth month | | | | |
| 1002 340 2002 170 Design filing fee | 1401 | 330 | 2401 | 165 | Notice of Appeal | | | | |
| 1003 530 2003 265 Plant filing fee | 1402 | 330 | 2402 | | Filing a brief in support of an appeal | | | | |
| 1004 770 2004 385 Reissue filing fee | 1403 | 290 | 2403 | 145 | Request for oral hearing | | | | |
| 1005 160 2005 80 Provisional filing fee | 1451 1452 | 1,510 110 | 1451 2452 | 1,510 55 | Petition to institute a public use proceeding Petition to revive unavoidable | | | | |
| SUBTOTAL (1) (\$) 770.00 | 1453 | 1,330 | 2453 | 665 | Petition to revive - unintentional | \dashv | | | |
| 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE | 1501 | 1,330 | 2501 | 665 | Utility issue fee (or reissue) | \neg | | | |
| Extra Fee from Claims below Fee Paid | 1502 | 480 | 2502 | 240 | Design issue fee | | | | |
| Total Claims 52 -20** = 32 x 18.00 = 576.00 | 1503 | 640 | 2503 | 320 | Plant issue fee | 一 | | | |
| Independent 5 -3** = 2 x 86.00 = 172.00 | 1460 | 130 | 1460 | 130 | Petitions to the Commissioner | | | | |
| Multiple Dependent = 290.00 | 1807 | 50 | 1807 | 50 | Processing fee under 37 CFR 1.17(q) | | | | |
| Large Entity Small Entity | 1806 | 180 | 1806 | 180 | Submission of Information Disclosure Stmt | | | | |
| Fee Fee Fee Fee Fee Description | 8021 | 40 | 8021 | 40 | Recording each patent assignment per | \neg | | | |
| 1202 | 1809 | 770 | 2000 | 205 | property (times number of properties) Filing a submission after final rejection | | | | |
| 1201 86 2201 43 Independent claims in excess of 3 | 1009 | 770 | 2809 | 385 | (37 CFR 1.129(a)) | | | | |
| 1203 290 2203 145 Multiple dependent claim, if not paid | 1810 | 770 | 2810 | 385 | For each additional invention to be examined (37CFR 1.129(b)) | | | | |
| 1204 86 2204 43 ** Reissue independent claims over original patent | 1801 | 770 | 2801 | 385 | Request for Continued Examination (RCE) | | | | |
| 1205 18 2205 9 ** Reissue claims in excess of 20 | 1802 | 900 | 1802 | 900 | Request for expedited examination of a design application | | | | |
| and over original patent | Other | fee (spe | ee (specify) | | | | | | |
| SUBTOTAL (2) (\$) 1038.00 | *Redu | ced by E | Basic Fi | ling Fee | Paid SUBTOTAL (3) (\$) | 0.00 | | | |
| **or number previously paid, if greater, For Reissues, see above | <u> </u> | | | | | | | | |
| SUBMITTED BY | | | | | (Complete (if applicable)) | | | | |
| Name (Print/Type) Cynthia M. Soroos | | ration No ey/Agent) | | ,623 | Telephone (617) 227-7400 | | | | |
| Signature | 1 | | | | Date January 26, 2004 | | | | |
| | | | | | 3333., 25, 2601 | | | | |
| - I | | | | | | | | | |

| I hereby certify that this corresp | ondence is being deposite | d with the U. | S. Postal S | Service as | Express Mail, A | irbill No. EL | 982738639 US |
|------------------------------------|----------------------------|---------------|-------------|------------|------------------|---------------|----------------|
| in an envelope addressed to: N | AS Patent Application, Com | nnissioner fo | Patents, | P.O. Box | 1450, Alexandria | a, VA 22313 | 3-1450, on the |
| date shown below. | 4 | Lunth | 111 | MA | | | |

Dated: January 26, 2004

Signature: _

(Cynthia M. Soroos)

PTO/SB/22 (08-03)

Approved for use through 7/31/2006. OMB 0651-0031

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| 6 | $\langle \langle$ | In re Application | | L. Nelso | | ,,,,, | |
|--------------------------|---|---------------------------|------------------------|-------------------|----------------------|------------------|------------------------|
| | <i>I</i> I | Application Nu 10/39 | mber 1923-Conf. #8 | 809' | Filed | Marc | h 18, 2003 |
| <i>J</i> | | For METH | ODS OF PRE | PARING METAL-I | SUBSTITU BASED CH | TED TE | TRACYCLINE |
| | | Art Unit | N/A | Ex | aminer | Not | Yet Assigned |
| This is a reidentified a | quest under the provisions pplication. | s of 37 CFR 1.136 | (a) to extend | the perio | d for filing a | reply in | the above |
| The reques | ted extension and approp | riate non-small-e | ntity fee are as | follows (| check time | period | desired): |
| | One month (37 CFR 1.17 | 7(a)(1)) | | | \$ | ; | • |
| | Two months (37 CFR 1.1 | 17(a)(2)) | | | \$ | 3 | : . |
| | Three months (37 CFR 1 | l.17(a)(3)) | | | \$ | | |
| | Four months (37 CFR 1. | 17(a)(4)) | | | \$ | - | |
| x | Five months (37 CFR 1.1 | 17(a)(5)) | | | \$ | | 2,010.00 |
| App | licant claims small entity s | tatus. See 37 CF | R 1.27. There | efore, the | fee amour | nt shown | above is |
| | ced by one-half, and the r | | | · | | | ŧ |
| A ct | eck in the amount of the fe | ee is enclosed. | | | | | |
| Pay | ment by credit card. Form | PTO-2038 is atta | iched. | | | | • |
| X The | Director has already been | authorized to cha | arge fees in th | is applica | tion to a D | eposit A | ccount. |
| | Director is hereby authoriz | | fees which m | ay be rec | luired, or c | redit any | 1 |
| | payment, to Deposit Accor | · — | 12-0080 | | • | | |
| I am the | re enclosed a duplicate co | - • | | | | | |
| | applicant/inventor. assignee of record | | rest. See 37 (| CFR 3.71 | | | |
| á | | ler 37 CFR 3.73(I | | | |). | |
| | attorney or agent | of record. Regist | ation Number | | | | |
| | x attorney or agent | | ` ' | Λ | • | 1 | |
| | | er if acting under 37 | CFR 1.34(a) | / 147 | 93/623 | A | |
| Ja | nuary 26, 2004 Date | | | MW | VVVV / Signat | IIV | |
| ((| 517) 227-7400 | | | 1 | Oignat Cynthia M. | | - |
| | ephone Number | | | Ту | ped or prin | ted nam | |
| | natures of all the inventors or assign mature is required, see below | ees of record of the enti | re interest or their n | epresentativ | e(s) are require | d. Submit | multiple forms if more |
| NOTE: Sign | | | | | | | |
| NOTE: Signathan one sign | al of1 | forms are submitte | ed. | | | | |

in an envelope addressed to: Commissioner for Patents, P.Q. 213-1450, on the date shown below.

Dated: January 26, 2004

Signature: